REMARKS

1. Preliminary Remarks

a. Important notice regarding claim numbering

Applicant notes that the amendment submitted in the office action previously submitted on April 21, 2008 (the "April Reply") contained a typographical error that resulted in erroneous numbering of the claims. In Applicant's office action reply submitted on October 1, 2007, claims 37-40 were canceled. The amended claim set requested in April Reply indicated that only claim 37 was canceled, and did not show canceled claims 39 and 40. Therefore, new claims "38" and "39" that were added in the amendment of the April Reply really should have been claims 41 and 42. The claim amendments above and the remarks throughout this reply reflect the correct numbering, such that claims "38" and "39" are referred to as claims 41 and 42.

b. Status of the claims

Claims 21, 23, 35, 36, 41, and 42 are pending in this application. Claims 21, 23, 35, and 41 are allowed. Claims 21, 36, and 42 are amended. Applicant respectfully requests entry of the amendments and remarks made herein into the file history of the application. Upon entry of the amendments, claims 21, 23, 35, 36, 41, and 42 will be pending and under active consideration.

c. Amendments to the claims

Claim 21 is amended solely to correct a typographical error. The amendment does not affect the patentability of this claim.

Support for amended claim 36 can be found at paragraph 0023 of the specification as originally filed. Support for amended claim 42 can be found at claims 12-14 of the application as originally filed.

2. Patentability Remarks

a. 35 U.S.C. § 102

On page 3 of the Office Action, the Examiner rejects claim 41 under 35 U.S.C. § 102(b) as allegedly being anticipated by Fodor *et al* (US 2001/0053519 A1; "Fodor"). Amended claim 42 is related to a probe including a viral insert of 24 nucleotides in length. Fodor allegedly teaches a nucleic acid of 25 nucleotides with each nucleotide being A, C, T (or U), or G. Such a nucleic acid would have over 1.12 x 10¹⁵ possible sequences. The Examiner asserts that the specific sequence of the claimed probe is somehow taught by the vast number of sequences that may possibly be derived from Fodor. Applicant respectfully disagrees.

The **specific sequences** of SEQ ID NOs: 477, 480, or 482 are not disclosed in Fodor, nor is any sequence in Fodor even remotely similar to these sequences. There is also no teaching or suggestion in Fodor to isolate or select the specific sequence of SEQ ID NO: 477, 480, or 482 from the 1.12 x 10¹⁵ sequence choices of Fodor. Therefore, the probe of amended claim 42 is not anticipated because one of skill could not at once envisage the claimed sequence from among the near endless number of possible sequences

taught by Fodor. See MPEP § 2131.02, citing Ex parte A, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990) and In re Petering, 301 F.2d 676, 133 USPQ 275 (CCPA 1962). Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claim 42 under 35 U.S.C. § 102 over Fodor.

b. 35 U.S.C. § 103

On pages 3 and 4 of the Office Action, the Examiner rejects claim 36 as allegedly being unpatentable over Fodor. The Examiner asserts that it would have been obvious to make a vector comprising SEQ ID NOs: 477, 480, or 482 because it was known to insert the probe allegedly taught by Fodor into a vector. As discussed above, Fodor does not teach or suggest the specific sequence of SEQ ID NO: 477, 480, 482, or any remotely similar sequence from the 1.12 x 10¹⁵ possible sequences that could be generated from the 25-mer of Fodor. This fundamental defect of Fodor is not remedied by Fodor's alleged teaching to insert probe sequences into a vector. Accordingly, Fodor does not teach or suggest all the limitations of claim 36. In view of the foregoing remarks, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claim 36 under 35 U.S.C. § 103 over Fodor.

3. Conclusion

Applicant respectfully submits that the instant application is in good and proper order for allowance and early notification to this effect is solicited. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the instant application, the Examiner is encouraged to call the undersigned at the number listed below.

Respectfully submitted,

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